

Amendments to the Claims:

Please amend the claims as follows. This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method for computer-controlled monitoring of a manufacturing process of a plurality of physical objects, said method comprising the steps of:

providing at least one rule stored in a control computer, each of the at least one rule relating storing rules which relate to at least one status of at least one of the plurality of physical objects;

evaluating the plurality of physical objects based on the at least one rule to select a sample of the plurality of physical objects;

marking selecting a the sample of from the plurality of physical objects by using the rules, wherein physical objects of the sample are marked in such a way that the sample they can be subjected to a measurement; and

determining whether to perform further measurements on the sample based on forming rules on the basis of the criterion of reducing that the number of measurements is reduced and avoiding redundant measurements are avoided.

2. (Original) The method as claimed in claim 1, wherein the physical object is a wafer.

3. (Currently Amended) The method of as claimed in claim 2, wherein one of the at least one rule plurality of stored rules relates to a Statistical Process Control ("SPC") an SPC sampling status of the plurality of physical objects.

4. (Currently Amended) The method of as claimed in claim 2 or 3, wherein one of the at least one rule plurality of stored rules relates to an inquiry of a specific status of the plurality of physical objects.

5. (Currently Amended) The method of claim 2 as claimed in one of claims 2 to 4, wherein one of the at least one rule plurality of stored rules relates to an inquiry of an

explicit status of the plurality of physical objects at a process step.

6. (Currently Amended) The method of claim 2 as claimed in one of claims 2 to 5, wherein one of the at least one rule plurality of stored rules relates to an inquiry of a sampling status of the plurality of physical objects.

7. (Currently Amended) The method of claim 2 as claimed in one of claims 2 to 6, wherein one of the at least one rule plurality of stored rules relates to an inquiry of a special monitoring status of the plurality of physical objects.

8. (Currently Amended) The method of claim 1, further comprising: as claimed in one of claims 1 to 7, wherein

combining each of the at least one rule into a single rule the various stored rules are combined with one another.

9. (Currently Amended) The method of claim 1, further comprising: as claimed in one of claims 1 to 8, wherein

measuring the marked sample of the plurality of the marked physical objects are subjected to a measurement.

10. (Currently Amended) A device for computer-controlled monitoring of a manufacturing process of a plurality of physical objects with a processor which is set up in such a way that the following method steps can be carried out:

providing at least one rule relating storing plurality of rules, wherein the of rules relates to at least one status of at least one of the plurality of physical objects;

evaluating the plurality of physical objects based on the at least one rule to select a sample of the plurality of objects; and

marking selecting a the sample of from the plurality of physical objects by using the at least one rule, with the sample being marked in such a way that the sample [[it]] can be subjected to a measurement, the plurality of rules being formed on the basis of

~~the criterion that the number of measurements is reduced and redundant measurements are avoided; and~~

determining whether to perform further measurements on the sample based on a criterion of reducing the number of measurements and avoiding redundant measurements.

11. (Currently Amended) A computer-readable storage medium, in which a program for monitoring of a manufacturing process of a plurality of physical objects is stored, ~~the~~ which program executes the following method steps when it is run by a processor:

providing at least one rule relating storing plurality of rules, wherein the plurality of rules relates to at least one status of at least one of the plurality of physical objects;

evaluating the plurality of physical objects based on the at least one rule to select a sample of the plurality of objects; and

marking selecting a the sample of from the plurality of physical objects by using the at least one rule, with the sample being marked in such a way that the sample [[it]] can be subjected to a measurement, the plurality of rules being formed on the basis of the criterion that the number of measurements is reduced and redundant measurements are avoided; and

determining whether to perform further measurements on the sample based on a criterion of reducing the number of measurements and avoiding redundant measurements.

12. (Currently Amended) A computer program element for monitoring of a manufacturing process of a plurality of physical objects which executes the following method steps when it is run by a processor:

providing at least one rule relating storing a plurality of rules, wherein the plurality of rules relating to at least one status of at least one of the plurality of physical objects;

evaluating the plurality of physical objects based on the at least one rule to select a sample of the plurality of objects; and

marking selecting a the sample of from the plurality of physical objects by using the at least one rule, with the sample being marked in such a way that the sample [[it]]

~~can be subjected to a measurement, the plurality of rules being formed on the basis of the criterion that the number of measurements is reduced and redundant measurements are avoided; and~~

determining whether to perform further measurements on the sample based on a criterion of reducing the number of measurements and avoiding redundant measurements.